REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 2, 4, 6, 19, 23, 28, and 32 are amended. Claims 7-18 were previously withdrawn and are canceled without prejudice as part of this Response. New claim 43 is added. Claims 1-6 and 19-43 are pending in this application.

Cited References

Applicant notes that U.S. Patent No. 6,832,369 to Kryka has been used as a basis for rejection in the December 21, 2004 Office Action. However, the Kryka patent has not been listed on the Form PTO-892. Applicant respectfully requests that a Form PTO-892 citing the Kryka patent be sent to Applicant in order to ensure the Kryka patent will be listed in the References Cited section of any patent that issues from the present application.

35 U.S.C. § 112

Claim 28 stands rejected under 35 U.S.C. §112, second paragraph. As part of this Response, claim 28 has been amended to correct the antecedent basis issue noted in the December 21, 2004 Office Action. Applicant respectfully submits that amended claim 28 complies with 35 U.S.C. §112, second paragraph.

Applicant respectfully requests that the §112 rejections be withdrawn.

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<u>35 U.S.C. § 102</u>

Claims 1 and 19 stand rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,292,827 to Raz (hereinafter "Raz"). Applicant respectfully submits that claims 1 and 19 are not anticipated by Raz.

Raz is directed to information transfer systems and method with dynamic distribution of data, control and management of information (see, Title). Raz discusses a forms generator/processor that provides the ability to scan paper-based forms and convert them to HTML documents using OCR technology (see, col. 12, lines 37-40). Form blanks are automatically converted to fields that can be typed into (see, col. 12, lines 40-41). Validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45).

In contrast, amended claim 1 recites:

> One or more computer-readable media comprising computer-executable instructions that, when executed, direct a processor to perform acts comprising:
> identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field;
> identifying validation code that, when executed, validates that the input conforms to the one or more restrictions; and
> adding, to a new form definition that includes a non-custom field corresponding to the custom field, the identified validation code.

Applicant respectfully submits that no such identifying and adding is disclosed in Raz.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Amended claim 1, on the other hand, recites identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field. Applicant

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respectfully submits that scanning a paper-based form does not disclose identifying a custom field on a source code form definition as recited in amended claim 1.

For at least these reasons, Applicant respectfully submits that amended claim 1 is allowable over Raz.

With respect to amended claim 19, amended claim 19 recites:

> A computerized method comprising:
> identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input; and
> automatically adding validation code to source code of the form, wherein the validation code is based at least in part on the one or more desired fields and one or more desired input restrictions associated with the one or more desired fields.

Applicant respectfully submits that no such identifying and automatically adding validation code is disclosed in Raz.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Amended claim 19, on the other hand, recites identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input. Applicant respectfully submits that scanning a paper-based form does not disclose identifying one or more desired fields from an input form definition written in a source code as recited in amended claim 19.

For at least these reasons, Applicant respectfully submits that amended claim 19 is allowable over Raz.

Applicant respectfully requests that the §102 rejections be withdrawn.

35 U.S.C. § 103

Claims 2-6, 20-24, and 26-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Raz in view of Laura Lemay's Workshop JavaScript (hereinafter "Lemay"). Applicant respectfully submits that claims 2-6, 20-24, and 26-42 are not obvious over Raz in view of Lemay.

Lemay is directed to validating form data with event handlers (see, p. 132). This validation of Lemay refers to checking each field to ensure that it contains a proper value and advising the user if it is incorrect (see, p. 132).

With respect to claims 2-6, claims 2-6 depend from amended claim 1, and Applicant respectfully submits that claims 2-6 are allowable over Raz at least because of their dependency on amended claim 1. Furthermore, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, the deficiencies of Raz discussed above with respect to amended claim 1. For at least these reasons, Applicant respectfully submits that claims 2-6 are allowable over Raz in view of Lemay.

With respect to claims 20-22, claims 20-22 depend from amended claim 19, and Applicant respectfully submits that claims 20-22 are allowable over Raz at least because of their dependency on amended claim 19. Furthermore, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, the deficiencies of Raz discussed above with respect to amended claim 19. For at least these reasons, Applicant respectfully submits that claims 20-22 are allowable over Raz in view of Lemay.

With respect to amended claim 23, amended claim 23 recites:

A system comprising:
a form analyzer configured to identify one or more custom tags in a source code form definition; and
a tag replacement module, coupled to the form analyzer, configured to replace each of the one or more custom tags with another tag, and further to add, to a form definition, for each of the one or more custom tags, validation code to validate subsequent inputs to a field corresponding to the tag.

Applicant respectfully submits that no such form analyzer and tag replacement module is disclosed in Raz in view of Lemay.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Amended claim 23, on the other hand, recites a form analyzer configured to identify one or more custom tags in a source code form definition. Applicant respectfully submits that scanning a paper-based form does not disclose a form analyzer configured to identify one or more custom tags in a source code form definition as recited in amended claim 23. The validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

For at least these reasons, Applicant respectfully submits that amended claim 23 is allowable over Raz in view of Lemay.

With respect to claims 24 and 26-31, claims 24 and 26-31 depend from amended claim 23, and Applicant respectfully submits that claims 24 and 26-31 are allowable over Raz in view of Lemay at least because of their dependency on amended claim 23. For at least these reasons, Applicant respectfully submits that claims 24 and 26-31 are allowable over Raz in view of Lemay.

With respect to amended claim 32, amended claim 32 recites in part:

> receiving a form definition including one or more custom tags, wherein each custom tag corresponds to a data input, and wherein each custom tag includes one or more associated input restrictions;

Applicant respectfully submits that no such receiving is disclosed in Raz in view of Lemay.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Amended claim 32, on the other hand, recites receiving a form definition including one or more custom tags, wherein each custom tag corresponds to a data input, and wherein each custom tag includes one or more associated input restrictions. Applicant respectfully submits that the scanning of a paper-based form does not disclose receiving a form definition including one or more custom tags, and wherein each custom tag includes one or more associated input restrictions. Applicant respectfully submits that there is no discussion or mention in Raz of the paper-based form including one or more custom tags that each include one or more associated input restrictions. Accordingly, Applicant respectfully submits that Raz does not disclose receiving a form definition including one or more custom tags, wherein each custom tag corresponds to a data input, and wherein each custom tag includes one or more associated input restrictions as recited in amended claim 32. The validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

For at least these reasons, Applicant respectfully submits that amended claim 32 is allowable over Raz in view of Lemay.

With respect to claims 33-35 and 37, claims 33-35 and 37 depend from amended claim 32, and Applicant respectfully submits that claims 33-35 and 37 are allowable over Raz in view of Lemay at least because of their dependency on amended claim 32. For at least these reasons, Applicant respectfully submits that claims 33-35 and 37 are allowable over Raz in view of Lemay.

With respect to claim 36, claim 36 depends from amended claim 32 and Applicant respectfully submits that claim 36 is allowable over Raz in view of Lemay at least because of its dependency on amended claim 32. Furthermore, claim 36 recites:

> A method as recited in claim 32, wherein each input custom tag includes one or more attributes that identify the one or more associated input restrictions, and wherein each of the one or more attributes includes an indication of the attribute and a corresponding value that data input corresponding to the tag is to be restricted to.

Applicant respectfully submits that there is no disclosure or suggestion in Raz or Lemay of each input custom tag including one or more attributes that identify the one or more associated input restrictions. As discussed above, Raz is directed to scanning paper-based forms and converting them to HTML documents using OCR technology. There is no discussion or mention of such paper-based forms including one or more attributes that identify input restrictions. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose or suggest wherein each input custom tag includes one or more attributes that identify the one or more associated input restrictions as recited in claim 36. The validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

For at least these reasons, Applicant respectfully submits that claim 36 is allowable over Raz in view of Lemay.

With respect to claim 38, claim 38 recites:

> A data structure comprising:
> a first portion identifying an input field for a form; and
> a second portion identifying one or more restrictions on inputs to the input field, and further identifying validation code to be added to a page to enforce the one or more restrictions on inputs to the input field.

Applicant respectfully submits that Raz in view of Lemay does not disclose or suggest a data structure having the first and second portions recited in claim 38.

In the December 21, 2004 Office Action, Raz at col. 12, lines 36-49 is cited as teaching the data structure of claim 38 (see, December 21, 2004 Office Action at p. 15). It appears from this rejection that the HTML form fields of Raz are relied on as disclosing the input field for a form of claim 38. However, if this were the case, then in order to satisfy the language of claim 38 Raz would need to disclose a data structure that includes a first portion identifying those HTML form fields and a second portion identifying one or more restrictions on inputs to the HTML form fields and further identifying validation code to be added to a page to enforce the one or more restrictions on inputs to the HTML form fields. Applicant respectfully submits that there is no such data structure disclosed or discussed in Raz. Although Raz states that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45), there is no discussion or mention in Raz of where such validation functions come from, much less any discussion or mention that a second portion of the data structure identifying the HTML form fields identifies one or more restrictions on inputs to

the HTML form fields and further identifies validation code to be added to a page to enforce the restrictions. The mere mention of adding validation functions to fields of an HTML form does not disclose the same data structure identifying both the fields and validation code to be added to a page to enforce restrictions on inputs to those fields.

With respect to Lemay, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

For at least these reasons, Applicant respectfully submits that claim 38 is allowable over Raz in view of Lemay.

With respect to claims 39-42, claims 39-42 depend from claim 38, and Applicant respectfully submits that claims 39-42 are allowable over Raz in view of Lemay at least because of their dependency on claim 38. For at least these reasons, Applicant respectfully submits that claims 39-42 are allowable over Raz in view of Lemay.

Claim 25 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Raz in view of Lemay and further in view of U.S. Patent No. 6,832,369 to Kryka (hereinafter "Kryka"). Applicant respectfully submits that claim 25 is not obvious over Raz in view of Lemay and Kryka.

Kryka is directed to the initialization of static data in object oriented systems (see, Title). In Kryka, a compiler for object-oriented programming code in a language which employs run-time static initialization semantics (such as the JAVA language) analyzes the static initialization code to find a subset of initialization statements which must execute under all conditions, creates an image of the static storage in which the variables initialized by statements in the subset

are pre-initialized at compile time, and removes statements in the subset from the final compiled code of machine level instructions (see, col. 2, lines 44-53).

Claim 25 depends depend from amended claim 23, and Applicant respectfully submits that claim 25 is allowable over Raz in view of Lemay at least because of its dependency on amended claim 23. Furthermore, the initialization of static data in object oriented systems of Kryka is not cited as curing, and does not cure, the deficiencies of Raz in view of Lemay discussed above with respect to amended claim 23. For at least these reasons, Applicant respectfully submits that claim 25 is allowable over Raz in view of Lemay and Kryka.

Applicant respectfully requests that the §103 rejections be withdrawn.

New Claims

New claim 43 is added. New claim 43 depends from amended claim 1 and Applicant respectfully submits that new claim 43 is allowable over the cited references at least because of its dependency on amended claim 1. Furthermore, Applicant respectfully submits that the cited references do not disclose or suggest one or more computer-readable media as recited in claim 1, wherein the computer-executable instructions further direct the processor to perform acts comprising: identifying, on the source code form definition, one or more restrictions for the custom field; and using, in identifying the validation code, the one or more restrictions, as recited in new claim 43. For at least these reasons, Applicant respectfully submits that new claim 43 is allowable over the cited references.

Conclusion

Claims 1-6 and 19-43 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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